

2. The method of claim 1, further comprising:  
the second multimedia device providing one or more  
handshake signals on the bus to the first multimedia  
device for indicating said periodic multimedia data  
transfers can proceed, wherein said providing one or  
more handshake signals on the bus to the first multi-  
media device for indicating said periodic multimedia  
data transfers can proceed occurs in response to the  
second multimedia device receiving the one or more  
request signals on the bus requesting said periodic  
multimedia data transfer.

3. The method of claim 2, further comprising:  
wherein the one or more request signals includes the first  
multimedia device transferring information regarding  
said periodic multimedia data transfer.

4. The method of claim 3, wherein said information  
regarding said periodic multimedia data transfer includes  
periodicity information indicating an approximate period or  
frequency at which said periodic multimedia data transfers  
occur.

5. The method of claim 4, further comprising:  
the second multimedia device determining if the second  
multimedia device can guarantee availability at said  
frequency specified in said information regarding said  
periodic multimedia data transfer;  
wherein the second multimedia device providing said one  
or more handshake signals on the bus to the first  
multimedia device indicating said multimedia bus  
transfer comprising periodic multimedia data can pro-  
ceed is performed in response to the second multimedia  
device determining that the second multimedia device  
can guarantee availability at said frequency specified in  
said information regarding said periodic multimedia  
data transfer.

6. The method of claim 1, wherein said bus is the  
peripheral component interconnect (PCI) bus.

7. The method of claim 1, wherein said bus is a dedicated  
multimedia bus.

8. The method of claim 1, wherein said periodic multi-  
media data comprises motion video data at a plurality of  
frames per second.

9. The method of claim 1, wherein said periodic multi-  
media data comprises audio data at a plurality of cycles per  
second.

10. The method of claim 1, wherein said periodic multi-  
media data comprises communication data at a plurality of  
transmissions per second.

11. A computer system, comprising:  
a CPU;  
main memory coupled to the CPU which stores data  
accessible by the CPU;  
bridge logic coupled to the CPU and to the main memory,  
wherein the bridge logic includes a memory controller  
coupled to the main memory and also includes bus  
interface logic;  
a bus coupled to the bridge logic, wherein said bus  
includes a plurality of data lines and control lines;  
a plurality of multimedia devices coupled to said bus,  
wherein each of said multimedia devices performs  
operations on said bus, wherein the operations include  
normal data transfers and periodic data transfers,  
wherein each of said multimedia devices includes:  
means for generating one or more request signals on the  
bus to a target multimedia device requesting that a  
periodic data transfer is desired;

means for receiving one or more request signals on the  
bus from a source multimedia device requesting that a  
periodic data transfer is desired;  
means for performing a plurality of periodic data transfers  
on the bus comprising periodic multimedia data to the  
target multimedia device, wherein said plurality of  
periodic data transfers occur after said one or more  
request signals have been generated, wherein said plu-  
rality of periodic data transfers on the bus comprise  
transfers of said periodic data on the bus to the target  
multimedia device, wherein said plurality of periodic  
data transfers on the bus are performed periodically on  
the bus, wherein said periodic data transfers do not  
require further control or handshaking signals prior to  
said periodic data transfers.

12. The computer system of claim 11, wherein said means  
for receiving includes means for providing one or more  
handshaking signals on the bus to a source multimedia  
device indicating a periodic data transfer can proceed,  
wherein said means for providing operates in response to the  
second multimedia device receiving the one or more request  
signals on the bus indicating said periodic data transfer is  
desired.

13. The computer system of claim 11, wherein said means  
for generating also transfers information regarding said  
periodic data transfer to the target multimedia device.

14. The computer system of claim 13, wherein said  
information regarding said periodic data transfer includes  
periodicity information indicating an approximate period or  
frequency at which said periodic data transfers occur.

15. The computer system of claim 14, wherein said means  
for receiving determines if the multimedia device can guar-  
antee availability at a frequency specified in said periodicity  
information received from the source multimedia device;  
wherein said means for providing the source multimedia  
device indicating said transfer comprising periodic  
multimedia data can transmits said one or more hand-  
shaking signals in response to the means for receiving  
determining that the multimedia device can guarantee  
availability at said frequency specified in said periodic-  
ity information received from the source multimedia  
device.

16. The computer system of claim 11, wherein said bus is  
the peripheral component interconnect (PCI) bus.

17. The computer system of claim 11, wherein said bus is  
a dedicated multimedia bus.

18. The method of claim 11, wherein said periodic data  
comprises motion video data at a plurality of frames per  
second.

19. The computer system of claim 11, wherein said  
periodic data comprises audio data at a plurality of cycles  
per second.

20. A method for transferring periodic multimedia data on  
a bus in a computer system, wherein the computer system  
comprises a CPU, main memory coupled to the CPU which  
stores data accessible by the CPU, bridge logic coupled to  
the CPU and the main memory, a bus coupled to the bridge  
logic which transfers multimedia data, and a plurality of  
multimedia devices coupled to the bus, the method com-  
prising:  
a first multimedia device generating addressing and con-  
trol signals on the bus for a multimedia bus transfer,  
wherein the multimedia bus transfer is intended for a  
second multimedia device, wherein the multimedia bus  
transfer is one of a set of transfer types including a  
normal data transfer and a periodic multimedia data  
transfer;